



### ABSTRACT OF DISCLOSURE

A fusing system and a temperature control method thereof for use in an image forming apparatus. The fusing system includes a control unit having a controller. The controller determines whether to initiate a heater driving-start timing, on the basis of one of a first time  $t_1$  and a third time  $t_3$ , and a second time  $t_2$ , when a sheet of printing paper is picked up by the pickup roller, or when a leading end of the sheet of the printing paper picked up by the pickup roller operates the paper jam sensor, the first time  $t_1$  being a time when the sheet of printing paper is picked up to a point of time when the sheet of printing paper arrives at the fusing roller, the second time  $t_2$  being a time required until a heat generated from the heater arrives at a surface of the fusing roller, and the third time  $t_3$  being a time from when the sheet of printing paper operates the paper jam sensor to when the sheet of printing paper is arrives at the fusing roller.